

METHODS AND SYSTEMS FOR PLANARIZING WORKPIECES, E.G.,  
MICROELECTRONIC WORKPIECES

ABSTRACT OF THE DISCLOSURE

This disclosure provides methods and apparatus for predictably changing the thickness of a microfeature workpiece. One implementation provides a planarizing method in which a first workpiece is planarized in first and second planarizing processes and a total change in thickness is determined. This thickness change is modified by a thickness offset associated with the second planarizing process and a material removal rate is calculated from this modified thickness change and the time on the first planarizer. A thickness of a second microfeature workpiece is measured and a target thickness of material to be removed is determined. A target planarizing time is then determined as a function of the target thickness reduction and the material removal rate.